



Duke Energy 1201 Main Street Capital Center Building Suite 1180 Columbia, SC 29201

o: 803.988.7130 f: 803.988.7123 Rebecca.Dulin@duke-energy.com

May 30, 2017

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd Chief Clerk/Administrator Public Service Commission of South Carolina 101 Executive Center Drive, Suite 100 Columbia, South Carolina 29210

Re: Duke Energy Progress, LLC – Monthly Fuel Report Docket No. 2006-176-E

Dear Mrs. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is Duke Energy Progress, LLC's Monthly Fuel Report in Docket No. 2006-176-E for the month of April 2017.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803-988-7130.

Rebecu Din

Sincerely,

Rebecca J. Dulin

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff

Mr. Jeffrey M. Nelson, Office of Regulatory Staff

Ms. Shannon Bowyer Hudson, Office of Regulatory Staff

Ms. Nanette Edwards, Office of Regulatory Staff

Michael Seaman-Huynh, Office of Regulatory Staff

Ms. Heather Shirley Smith, Duke Energy

Mr. Scott Elliott, Elliott & Elliott, P.A.

Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC

Mr. Gary Walsh, Walsh Consulting, LLC

Duke Energy Progress Summary of Monthly Fuel Report

Schedule 1

Line No.	<u>Item</u>		April 2017
1	Fuel and Fuel-related Costs excluding DERP incremental costs	\$	112,342,452
	MWH sales:		
2	Total System Sales		4,403,307
3	Less intersystem sales	_	215,666
4	Total sales less intersystem sales	_	4,187,641
5	Total fuel and fuel-related costs (¢/KWH) (Line 1/Line 4)	_	2.6827
6	Current fuel & fuel-related cost component (¢/KWH) (per Schedule 4)	_	2.3508
	Generation Mix (MWH):		
	Fossil (By Primary Fuel Type):		
7	Coal		400,380
8	Oil		6,599
9	Natural Gas - Combustion Turbine		92,495
10	Natural Gas - Combined Cycle		1,392,648
11	Total Fossil		1,892,122
12	Nuclear		1,927,828
13	Hydro - Conventional		69,674
14	Solar Distributed Generation		25,475
15	Total MWH generation	_	3,915,099

Note: Detail amounts may not add to totals shown due to rounding.

Duke Energy Progress Details of Fuel and Fuel-Related Costs

Description	 April 2017
Fuel and Fuel-Related Costs:	
Steam Generation - Account 501	
0501110 coal consumed - steam	14,611,913
0501310 fuel oil consumed - steam	894,036
Total Steam Generation - Account 501	 15,505,949
Nuclear Generation - Account 518	
0518100 burnup of owned fuel	13,356,563
0518600 - Disposal Cost	-
Total Nuclear Generation - Account 518	13,356,563
Other Generation - Account 547	
0547000 natural gas consumed - Combustion Turbine	5,236,773
0547000 natural gas consumed - Combined Cycle	43,880,249
0547200 fuel oil consumed	 221,641
Total Other Generation - Account 547	 49,338,663
Purchased Power and Net Interchange - Account 555	
Fuel and fuel-related component of purchased power	35,238,514
PURPA purchased power capacity	4,643,614
Total Purchased Power and Net Interchange - Account 555	 39,882,128
Less fuel and fuel-related costs recovered through intersystem sales - Account 447	6,192,408
Total Costs Included in Base Fuel Component	\$ 111,890,894
Environmental Costs	
0509030, 0509212, 0557451 emission allowance expense	\$ 3,359
0502020, 0502030, 0502040, 0502080, 0502090, 0548020 reagents expense	553,725
Emission Allowance Gains	(52)
Less reagents expense recovered through intersystem sales - Account 447	89,780
Less emissions expense recovered through intersystem sales - Account 447	 15,693
Total Costs Included in Environmental Component	451,558
Fuel and Fuel-related Costs excluding DERP incremental costs	\$ 112,342,452
DERP Incremental Costs	91,026
Total Fuel and Fuel-related Costs	\$ 112,433,478

Notes: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY PROGRESS PURCHASED POWER AND INTERCHANGE SOUTH CAROLINA

APRIL 2017

Schedule 3, Purchases Page 1 of 2

Purchased Power	 Total		Capacity	Non-capacity					
Marketers, Utilities, Other	 \$		\$	mWh		Fuel \$	l	Non-fuel \$	
Broad River Energy, LLC.	\$ 2,013,612	\$	1,050,012	16,397	\$	963,600		_	
City of Fayetteville	358,346		357,175	-		1,171		-	
Haywood EMC	29,850		29,850	-		-		-	
NCEMC	2,574,193		1,822,826	16,967		751,367		-	
PJM Interconnection, LLC.	26,032		-	1,022		26,032		-	
Smurfit Stone Container Corp	22,966		-	738		22,966		-	
Southern Company Services	3,444,628		772,044	78,197		2,672,584		-	
DE Carolinas - Native Load Transfer	8,702,502		-	295,902		8,703,182	\$	(680)	
DE Carolinas - Native Load Transfer Benefit	524,267		-	-		524,267		-	
Generation Imbalance	3,359			107		2,049		1,310	
	\$ 17,699,755	\$	4,031,907	409,330	\$	13,667,218	\$	630	
Act 236 PURPA Purchases									
Renewable Energy	\$ 18,953,152	\$	-	280,135	\$	18,953,152		-	
Other Qualifying Facilities	7,261,758		-	115,717		7,261,758		-	
	\$ 26,214,910	\$	<u> </u>	395,852	\$	26,214,910	\$	-	
Total Purchased Power	\$ 43,914,665	\$	4,031,907	805,182	\$	39,882,128	\$	630	

NOTE: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY PROGRESS INTERSYSTEM SALES* SOUTH CAROLINA

APRIL 2017

Schedule 3, Sales Page 2 of 2

	Total \$		Capacity	Non-capacity				
Sales			 \$	mWh		Fuel\$	N	Non-fuel \$
Market Based:								
NCEMC Purchase Power Agreement	\$	1,049,348	652,500	10,452	\$	323,452	\$	73,396
PJM Interconnection, LLC.		4,086	-	159		5,490		(1,404)
Other:								
DE Carolinas - Native Load Transfer Benefit		1,126,197	-	-		1,126,197		-
DE Carolinas - Native Load Transfer		4,992,070	-	205,054		4,842,742		149,328
Generation Imbalance		(3)	-	1		-		(3)
Total Intersystem Sales	\$	7,171,698	\$ 652,500	215,666	\$	6,297,881	\$	221,317

^{*} Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

Duke Energy Progress Over / (Under) Recovery of Fuel Costs April 2017

Line No.			Total Residential	General Service Non-Demand	Demand	Lighting	Total
1	Actual System kWh sales	Input					4,187,641,398
2	DERP Net Metered kWh generation	Input					116,492
3	Adjusted System kWh sales	L1 + L2				-	4,187,757,890
4	Actual S.C. Retail kWh sales	Input	128,069,097	18,808,809	293,614,431	6,798,177	447,290,514
5	DERP Net Metered kWh generation	Input	108,732	5,464	2,297		116,492
6	Adjusted S.C. Retail kWh sales	L4 + L5	128,177,829	18,814,273	293,616,728	6,798,177	447,407,006
7	Actual S.C. Demand units (kw)	L32 / 31b *100			640,150		
Base fuel c	component of recovery - non-capacity						
8	Incurred System base fuel - non-capacity expense	Input					\$107,247,279
9	Eliminate avoided fuel benefit of S.C. net metering	Input					\$3,833
10	Adjusted Incurred System base fuel - non-capacity expense	L8 + L9					\$107,251,111
11	Adjusted Incurred System base fuel - non-capacity rate (¢/kWh)	L10 / L3 * 100					2.561
12	S.C. Retail portion of adjusted incurred system expense	L6 * L11 / 100	\$3,282,715	\$481,845	\$7,519,709	\$174,106	\$11,458,375
13	Assign 100 % of Avoided Fuel Benefit of S.C net metering	Input	(\$2,054)	(\$207)	(\$1,571)	\$0	(\$3,833)
14	S.C. Retail portion of incurred system expense	L12 + L13	\$3,280,661	\$481,638	\$7,518,138	\$174,106	\$11,454,542
15	Billed base fuel - non-capacity rate (¢/kWh) - Note 1	Input	2.229	2.229	2.229	2.229	2.229
16	Billed base fuel - non-capacity revenue	L4 * L15 /100	\$2,854,259	\$419,248	\$6,544,666	\$151,531	\$9,969,704
17	DERP NEM incentive - fuel component	Input	(\$486)	(\$49)	(\$372)	\$0	(\$908)
18	Adjusted S.C. billed base fuel - non-capacity revenue	L16 + L17	\$2,853,773	\$419,199	\$6,544,294	\$151,531	\$9,968,796
19	S.C. base fuel - non-capacity over/(under) recovery	L18 - L14	(\$426,888)	(\$62,439)	(\$973,844)	(\$22,575)	(\$1,485,746)
20	Adjustment - Economic Purchases	Input	\$0	\$0	\$0	\$0	\$0
21	Total S.C. base fuel - non-capacity over/(under) recovery	L19 + L20	(\$426,888)	(\$62,439)	(\$973,844)	(\$22,575)	(\$1,485,746)
	component of recovery - capacity						
22a	Incurred base fuel - capacity rates by class (¢/kWh)	L23 / L4 * 100	0.208	0.143			
22b	Incurred base fuel - capacity rate (¢/kW)	L23 / L7 * 100			32		
23	Incurred S.C. base fuel - capacity expense	Input	\$265,811	\$26,817	\$203,366		\$495,994
24a	Billed base fuel - capacity rates by class (¢/kWh)	Input	0.181	0.128			
24b	Billed base fuel - capacity rate (¢/kW)	Input	4004.000	404.075	30	4.0	* 4 4 7 4 0 0
25	Billed S.C. base fuel - capacity revenue	L24a * L4 /100	\$231,289	\$24,075	•	\$0	\$447,408
26	S.C. base fuel - capacity over/(under) recovery	L25 - L23	(\$34,522)	(\$2,742)		\$0	(\$48,586)
27 28	Adjustment Total S.C. base fuel - capacity over/(under) recovery	Input L26 + L27	\$0 (\$34,522)	\$0 (\$2,742)	\$0 (\$11,322)	\$0 \$0	\$0 (\$48,586)
Environmo	ental component of recovery						
29a	Incurred environmental rates by class (¢/kWh)	L30 / L4 * 100	0.020	0.014			
29b	Incurred environmental rate (¢/kW)	L30 / L7 * 100	0.020	0.011	3		
30	Incurred S.C. environmental expense	Input	\$25,848	\$2,608	\$19,776		\$48,232
31a	Billed environmental rates by class (¢/kWh)	Input	0.042	0.031	ψ.,,,,,		ψ 10,202
31b	Billed environmental rate (¢/kW)	Input	0.012	3.001	6		
32	Billed S.C. environmental revenue	L31a * L4 /100	\$53,375	\$5,831	_		\$97,615
33	S.C. environmental over/(under) recovery	L32 - L30	\$27,527	\$3,223		\$0	\$49,383
34	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
35	Total S.C. environmental over/(under) recovery	L33 + L34	\$27,527	\$3,223	\$18,633	\$0	\$49,383
36	Total over / (under) recovery	L21 + L28 + L35	(\$433,883)	(\$61,958)	(\$966,533)	(\$22,575)	(\$1,484,949)

Schedule 4 Page 2 of 2

Duke Energy Progress Over / (Under) Recovery of Fuel Costs April 2017

Year 2016-2017

	0 111	T. I.B. II. II.	General Service	Domand	Lighting	Cubtotal	Prior Period	Total
Cumulative over / (under) recovery	Cumulative	Total Residential	Non-Demand	Demand	Lighting	Subtotal	Adjustments	Total
Balance ending February 2016	(8,178,450)							
March 2016 - actual	(5,113,937)	\$1,257,169	\$149,823	\$1,614,366	\$43,155	\$3,064,513	\$0	\$3,064,513
_/2 April 2016 - actual	(2,862,055)	\$579,097	\$91,208	\$1,546,143	\$35,434	\$2,251,882	\$0	\$2,251,882
May 2016 - actual	(2,055,487)	\$166,326	\$33,470	\$597,607	\$9,165	\$806,568	\$0	\$806,568
_/2 June 2016 - actual	(1,637,768)	\$134,334	\$21,348	\$171,533	\$18,077	\$345,292	\$72,427	\$417,719
July 2016 - actual	(4,666,718)	(\$1,099,935)	(\$153,840)	(\$1,737,737)	(\$37,438)	(\$3,028,950)	\$0	(\$3,028,950)
August 2016 - actual	(6,588,776)	(\$647,989)	(\$90,105)	(\$1,162,202)	(\$21,762)	(\$1,922,058)	\$0	(\$1,922,058)
September 2016 - actual	(6,774,119)	(\$78,301)	(\$4,082)	(\$101,162)	(\$1,798)	(\$185,343)	\$0	(\$185,343)
October 2016 - actual	(7,344,031)	(\$175,489)	(\$21,964)	(\$362,824)	(\$9,635)	(\$569,912)	\$0	(\$569,912)
November 2016 - actual	(7,418,007)	\$25,549	\$877	(\$94,569)	(\$5,833)	(\$73,976)	\$0	(\$73,976)
_/2 December 2016 - actual	(8,833,804)	(\$486,437)	(\$69,145)	(\$834,208)	(\$26,007)	(\$1,415,797)	\$0	(\$1,415,797)
January 2017 - actual	(8,318,705)	\$335,500	\$24,481	\$154,071	\$1,047	\$515,099	\$0	\$515,099
_/2 February 2017 - actual	(7,300,819)	\$406,142	\$42,679	\$557,237	\$11,777	\$1,017,835	\$51	\$1,017,886
March 2017 - actual	(9,335,254)	(\$692,916)	(\$94,251)	(\$1,212,327)	(\$34,941)	(\$2,034,435)	\$0	(\$2,034,435)
April 2017 - actual	(10,820,203)	(\$433,883)	(\$61,958)	(\$966,533)	(\$22,575)	(\$1,484,949)	\$0	(\$1,484,949)
_/3 May 2017 - forecast	(10,604,775)	\$44,465	\$13,825	\$152,570	\$4,568	\$215,428	\$0	\$215,428
_/3 June 2017 - forecast	(11,304,589)	(\$223,323)	(\$30,051)	(\$436,125)	(\$10,315)	(\$699,814)	\$0	(\$699,814)

Line No.			Residential	Commercial	Industrial	Total
Distributed	Energy Resource Program component of recovery: incremental	costs				
37	Incurred S.C. DERP incremental expense	Input	\$48,782	\$25,036	\$17,208	\$91,026
38	Billed S.C. DERP incremental rates by account (\$/account)	Input	0.35	0.70	62.56	
39	Billed S.C. DERP incremental revenue	Input	\$45,713	\$21,455	\$15,650	\$82,818
40	S.C. DERP incremental over/(under) recovery	L39 - L37	(\$3,069)	(\$3,581)	(\$1,558)	(\$8,208)
41	Adjustment	Input	\$0	\$0	\$0	\$0
42	Total S.C. DERP incremental over/(under) recovery	L40 + L41	(\$3,069)	(\$3,581)	(\$1,558)	(\$8,208)

Year 2016-2017

Cumulative over / (under) recovery	Cumulative	Residential	Commercial	Industrial	Subtotal	Prior Period Adjustments	Total
Balance ending February 2016	(409,036)						_
March 2016 - actual	(332,983)	\$47,587	\$24,676	\$3,790	\$76,053	\$0	\$76,053
_/2 April 2016 - actual	(239,880)	\$57,498	\$29,093	\$6,512	\$93,103	\$0	\$93,103
May 2016 - actual	(230,645)	\$8,264	\$7,454	(\$6,483)	\$9,235	\$0	\$9,235
June 2016 - actual	(363,127)	(\$75,641)	(\$29,326)	(\$27,515)	(\$132,482)	\$0	(\$132,482)
July 2016 - actual	(227,737)	\$76,605	\$35,021	\$23,764	\$135,390	\$0	\$135,390
August 2016 - actual	(230,217)	(\$5,161)	(\$836)	\$3,517	(\$2,480)	\$0	(\$2,480)
September 2016 - actual	(236,229)	(\$6,705)	(\$1,534)	\$2,227	(\$6,012)	\$0	(\$6,012)
October 2016 - actual	(239,973)	(\$5,679)	(\$1,069)	\$3,004	(\$3,744)	\$0	(\$3,744)
November 2016 - actual	(248,310)	(\$7,741)	(\$2,004)	\$1,408	(\$8,337)	\$0	(\$8,337)
December 2016 - actual	(252,038)	(\$4,938)	(\$759)	\$1,969	(\$3,728)	\$0	(\$3,728)
January 2017 - actual	(336,374)	(\$43,703)	(\$24,640)	(\$15,993)	(\$84,336)	\$0	(\$84,336)
February 2017 - actual	(367,732)	(\$15,333)	(\$10,137)	(\$5,888)	(\$31,358)	\$0	(\$31,358)
March 2017 - actual	(348,200)	\$11,829	\$3,912	\$3,791	\$19,532	\$0	\$19,532
April 2017 - actual	(356,408)	(\$3,069)	(\$3,581)	(\$1,558)	(\$8,208)	\$0	(\$8,208)
_/3 May 2017 - forecast	(444,744)	(\$45,171)	(\$26,942)	(\$16,223)	(\$88,336)	\$0	(\$88,336)
_/3 June 2017 - forecast	(564,669)	(\$62,085)	(\$35,631)	(\$22,209)	(\$119,925)	\$0	(\$119,925)

Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

_/1 Total residential billed fuel rate is a composite rate reflecting the approved residential rate of 2.246 and RECD 5% discount.

_/2 Includes prior period adjustments.

_/3 Forecast amounts based on low end of range of expected fuel rates.

Duke Energy Progress Fuel and Fuel Related Cost Report April 2017

Description	Weatherspoon CT	Lee CC	Sutton CC/CT	Robinson Nuclear	Asheville Steam	Asheville CT	Roxboro Steam	Mayo Steam
Cost of Fuel Purchased (\$)								
Coal	-	-	-	-	\$2,544,947	-	\$10,915,687	\$5,047,448
Oil	-	-	-	116,727	589,215	-	381,530	150,030
Gas - CC	-	17,717,074	13,856,227	-	-	-	-	-
Gas - CT	24	-	-	-	-	263,159	-	-
Total	\$24	\$17,717,074	\$13,856,227	\$116,727	\$3,134,162	\$263,159	\$11,297,217	\$5,197,478
Average Cost of Fuel Purchased (¢/MBTU))							
Coal	-	-	-	-	313.95	-	329.16	337.09
Oil	-	-	-	1,882.39	1,162.34	-	1,317.85	1,318.48
Gas - CC	-	436.55	488.69	-	-	-	-	-
Gas - CT	-	-	-	-	-	519.35	-	
Weighted Average	-	436.55	488.69	1,882.39	363.88	519.35	337.72	344.49
Cost of Fuel Burned (\$)								
Coal	-	-	-	-	\$2,225,679	-	\$10,100,844	\$2,285,390
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	3,988	-	-	-	25,023	203,788	794,827	74,186
Gas - CC	-	17,717,074	13,856,227	-	-	-	-	-
Gas - CT	24	-	-	-	-	263,159	-	-
Nuclear	-	-	-	2,863,292	-	-	-	-
Total	\$4,012	\$17,717,074	\$13,856,227	2,863,292	\$2,250,702	\$466,947	\$10,895,671	\$2,359,576
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	293.96	-	317.96	318.11
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	1,504.91	-	-	-	1,343.16	1,323.38	1,357.50	1,362.96
Gas - CC	-	436.55	488.69	-	-	-	-	-
Gas - CT	-	-	-	-	-	519.35	-	-
Nuclear	-	-	-	69.31	-	-	-	-
Weighted Average	1,513.79	436.55	488.69	69.31	296.53	706.75	336.77	325.97
Average Cost of Generation (¢/kWh)								
Coal	-	-	-	-	3.51	-	3.65	3.78
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	-	-	-	-	38.24	19.07	15.00	16.21
Gas - CC	-	3.36	3.47	-	-	-	-	-
Gas - CT	-	-	-	-	-	6.61	-	-
Nuclear	-	-	-	0.73	-	-	-	
Weighted Average	-	3.36	3.47	0.73	3.55	9.24	3.87	3.88
Burned MBTU's								
Coal	-	-	-	-	757,138	-	3,176,810	718,428
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	265	-	-	-	1,863	15,399	58,551	5,443
Gas - CC	-	4,058,437	2,835,380	-	-	-	-	-
Gas - CT	-	-	-	-	-	50,671	-	-
Nuclear	-	-	-	4,130,849	-	-	-	-
Total	265	4,058,437	2,835,380	4,130,849	759,001	66,070	3,235,361	723,871
Net Generation (mWh)								
Coal	-	-	-	-	63,359	-	276,605	60,416
Oil - CC	-	-	-	-	-	-	-	-
Oil - Steam/CT	(5)	-	(34)	-	65	1,069	5,298	458
Gas - CC	-	527,842	399,197	-	-	-	-	-
Gas - CT	(50)	-	-	-	-	3,984	-	-
Nuclear	-	-	-	392,198	-	-	-	-
Hydro (Total System)								
Solar (Total System)	(55)	507.040	200.402	202.400	C2 424	F 0F2	204 002	CO 074
Total	(55)	527,842	399,163	392,198	63,424	5,053	281,903	60,874
Cost of Reagents Consumed (\$)								
Ammonia	-	-	-	-	-	-	-	-
Limestone	-	-	-	-	55,436	-	254,235	77,899
Re-emission Chemical	-	-	-	-	-	-	_	
Sorbents	-	-	-	-	-	-	34,829	71,017
Urea	-	-	-	-	53,496	-	-	440.017
Total	Notes:	-	-	-	108,932	-	289,063	148,917

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.

Fuel cost information on this report does not reflect intercompany sharing of fuel-related merger savings between Duke Energy Carolinas and Duke Energy Progress.

Lee and Wayne oil burn is associated with inventory consumption shown on Schedule 6 for Wayne.

Duke Energy Progress Fuel and Fuel Related Cost Report April 2017

					Smith Energy			
	Brunswick	Blewett	Wayne County	Darlington	Complex	Harris	Current	Total 12 ME
Description	Nuclear	СТ	СТ	СТ	CC/CT	Nuclear	Month	April 2017
Cost of Fuel Purchased (\$)							\$40.500.000	* 055 070 000
Coal Oil	- 11,190	-	-	-	-	- 4 677	\$18,508,082	\$355,370,998
Gas - CC	11,190	_	-	-	12,306,948	4,677	1,253,369 43,880,249	17,415,178 554,060,310
Gas - CC Gas - CT	-	-	88,843	20,864	4,863,883	- -	5,236,773	125,157,439
Total	11,190	-	\$88,843	\$20,864	\$17,170,831	4,677	\$68,878,473	\$1,052,003,925
Average Cost of Fuel Purchased (¢/MBTU								
Coal	_	_	_	_	_	_	329.08	316.78
Oil	1,084.30	_	-	_	-	451.45	1,262.32	1,207.81
Gas - CC	-	_	-	_	400.84	-	440.38	417.80
Gas - CT	-	-	384.73	782.60	398.66	-	403.92	365.03
Weighted Average	1,084.30	-	384.73	782.60	400.22	451.45	405.55	375.01
Cost of Fuel Burned (\$)								
Coal	-	-	-	-	-	-	\$14,611,913	\$373,853,555
Oil - CC	-	-	-	-	92	-	92	276,813
Oil - Steam/CT	-	-	-	13,773	-	-	1,115,585	17,436,216
Gas - CC	-	-	-	-	12,306,948	-	43,880,249	554,060,310
Gas - CT	-	-	88,843	20,864	4,863,883	-	5,236,773	125,157,439
Nuclear	5,754,424	-	-	-	-	4,738,847	13,356,563	192,300,407
Total	\$5,754,424	-	\$88,843	\$34,637	\$17,170,923	\$4,738,847	\$78,201,175	\$1,263,084,741
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	-	-	314.07	318.27
Oil - CC	-	-	-	-	1,840.00	-	1,840.00	1,797.44
Oil - Steam/CT	-	-	-	1,708.81	-	-	1,355.07	1,337.86
Gas - CC	-	-	-	-	400.84	-	440.38	417.80
Gas - CT	-	-	384.73	782.60	398.66	-	403.92	365.03
Nuclear	63.15	-			-	65.45	65.20	64.20
Weighted Average	63.15	-	384.73	997.61	400.22	65.45	214.37	215.83
Average Cost of Generation (¢/kWh)								
Coal	-	-	-	-	-	-	3.65	3.36
Oil - CC	-	-	-	-	-	-	-	50.24
Oil - Steam/CT	-	-	-	-	-	-	16.91	17.94
Gas - CC	-	-	-	-	2.64	-	3.15	2.97
Gas - CT Nuclear	0.68	-	6.28	695.47	5.58	0.69	5.66 0.69	4.15 0.68
Weighted Average	0.68	-	6.28	-	3.11	0.69	2.00	2.04
Down and MDTINA								
Burned MBTU's							4 650 076	117 462 920
Coal Oil - CC	-	_	-	-	- 5	-	4,652,376 5	117,462,829 15,400
Oil - Steam/CT	_	_	_	806	-	_	82,327	1,303,292
Gas - CC	_	_	-	-	3,070,278	_	9,964,095	132,615,176
Gas - CT	-	_	23,092	2,666	1,220,048	-	1,296,477	34,287,016
Nuclear	9,112,749	_		-	-	7,240,369	20,483,967	299,530,768
Total	9,112,749	-	23,092	3,472	4,290,331	7,240,369	36,479,247	585,214,481
Net Generation (mWh)								
Coal	-	_	-	_	-	-	400,380	11,128,206
Oil - CC	-	_	_	_	_	-	-	551
Oil - Steam/CT	-	(27) -	(225)	-	_	6,599	97,200
Gas - CC	-	-	-	-	465,609	-	1,392,648	18,640,638
Gas - CT	-	-	1,414	3	87,144	-	92,495	3,018,386
Nuclear	847,297	-	-	-	-	688,333	1,927,828	28,379,260
Hydro (Total System)							69,674	362,508
Solar (Total System)							25,475	197,630
Total	847,297	(27) 1,414	(222)	552,753	688,333	3,915,099	61,824,379
Cost of Reagents Consumed (\$)								
Ammonia	-	-	-	-	\$6,813	-	\$6,813	\$3,065,584
Limestone	-	-	-	-	-	-	387,570	10,748,454
Re-emission Chemical	-	-	-	-	-	-	-	115,510
Sorbents	-	-	-	-	-	-	105,846	3,609,943
Urea	-	-	-	-	-	-	53,496	1,040,388
Total	-	-	-	-	6,813	-	553,725	18,579,878

Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report April 2017

Description	Weatherspoon	Lee	Sutton	Robinson	Asheville
Coal Data:					
Beginning balance	-	-	-	-	137,039
Tons received during period	-	-	-	-	32,803
Inventory adjustments	-	-	-	-	-
Tons burned during period	-	-	-	-	30,462
Ending balance	-	-	-	-	139,380
MBTUs per ton burned	-	-	-	-	24.86
Cost of ending inventory (\$/ton)	-	-	-	-	73.06
Oil Data:					
Beginning balance	655,855	-	3,164,645	78,040	2,831,545
Gallons received during period	-	-	-	44,934	367,332
Miscellaneous use and adjustments	(32)	-	-	-	(2,833)
Gallons burned during period	1,890	-	-	37,453	123,902
Ending balance	653,933	-	3,164,645	85,521	3,072,142
Cost of ending inventory (\$/gal)	2.11	-	2.80	2.69	1.85
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	3,857,103	2,670,757	-	49,004
MCF burned during period	-	3,857,103	2,670,757	-	49,004
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	-	10,185
Tons received during period	-	-	-	-	833
Inventory adjustments	-	-	-	-	-
Tons consumed during period	-	-	-	-	1,246
Ending balance	-	-	-	-	9,772
Cost of ending inventory (\$/ton)	-	-	-	-	42.24

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Gas is burned as received; therefore, inventory balances are not maintained.

The oil inventory data for Wayne reflects the common usage of the oil tank used for both Wayne and Lee units.

Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report April 2017

Description	Roxboro	Мауо	Brunswick	Blewett	Wayne County
Coal Data:					
Beginning balance	1,284,901	510,838	-	-	-
Tons received during period	130,558	60,514	-	-	-
Inventory adjustments	-	-	-	-	-
Tons burned during period	123,621	28,229	-	-	-
Ending balance	1,291,838	543,123	-	-	-
MBTUs per ton burned	25.70	25.45	-	-	-
Cost of ending inventory (\$/ton)	81.68	80.96	-	-	-
Oil Data:					
Beginning balance	477,499	246,471	179,790	797,106	11,982,942
Gallons received during period	209,791	82,457	7,479	-	-
Miscellaneous use and adjustments	(7,481)	(2,799)	-	-	-
Gallons burned during period	424,118	39,984	8,618	-	-
Ending balance	255,691	286,145	178,651	797,106	11,982,942
Cost of ending inventory (\$/gal)	1.87	1.86	2.69	2.34	2.41
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	-	-	-	22,096
MCF burned during period	-	-	-	-	22,096
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	96,484	17,829	-	-	-
Tons received during period	844	6,047	-	-	-
Inventory adjustments	-	-	-	-	-
Tons consumed during period	6,713	1,941	-	-	-
Ending balance	90,615	21,935	-	-	-
Cost of ending inventory (\$/ton)	35.63	37.37	-	-	-

Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report April 2017

Description	Darlington	Smith Energy Complex	Harris	Current Month	Total 12 ME April 2017
Coal Data:					
Beginning balance	-	-	-	1,932,778	2,178,953
Tons received during period	-	-	-	223,875	4,421,507
Inventory adjustments	-	-	-	-	36,131
Tons burned during period	-	-	-	182,312	4,662,250
Ending balance	-	-	-	1,974,341	1,974,341
MBTUs per ton burned	-	-	-	25.52	25.19
Cost of ending inventory (\$/ton)	-	-	-	80.87	80.87
Oil Data:					
Beginning balance	10,034,417	8,141,603	297,499	38,887,412	38,338,471
Gallons received during period	-	-	7,504	719,497	10,448,430
Miscellaneous use and adjustments	-	-	-	(13,145)	(267,349)
Gallons burned during period	5,837	40	-	641,842	9,567,630
Ending balance	10,028,580	8,141,563	305,003	38,951,922	38,951,922
Cost of ending inventory (\$/gal)	2.36	2.32	2.69	2.36	2.36
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	2,586	4,117,693	-	10,719,239	161,501,261
MCF burned during period	2,586	4,117,693	-	10,719,239	161,501,261
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	124,498	148,404
Tons received during period	-	-	-	7,724	281,484
Inventory adjustments	-	-	-	-	(10,345)
Tons consumed during period	-	-	-	9,900	297,221
Ending balance	-	-	-	122,322	122,322
Cost of ending inventory (\$/ton)	-	-	-	36.47	36.47

DUKE ENERGY PROGRESS ANALYSIS OF COAL PURCHASED APRIL 2017

STATION	TYPE	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ASHEVILLE	SPOT	-	\$ 2,190	-
	CONTRACT ADJUSTMENTS	32,803	2,434,765 107,992	74.22
	TOTAL	32,803	2,544,947	77.58
МАҮО	SPOT	-	-	-
	CONTRACT	60,515	4,950,113	81.80
	ADJUSTMENTS		97,335	
	TOTAL	60,515	5,047,448	83.41
ROXBORO	SPOT	-	(1,735)	-
	CONTRACT	130,558	10,283,166	78.76
	ADJUSTMENTS		634,256	<u>-</u>
	TOTAL	130,558	10,915,687	83.61
ALL PLANTS	SPOT CONTRACT	- 223,875	456 17,668,044	- 78.92
	ADJUSTMENTS		839,583	
	TOTAL	223,875	\$ 18,508,082	\$ 82.67

Schedule 8

DUKE ENERGY PROGRESS ANALYSIS OF COAL QUALITY RECEIVED APRIL 2017

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
ASHEVILLE	6.08	11.32	12,356	1.32
MAYO	7.45	9.61	12,372	2.00
ROXBORO	6.67	8.52	12,700	1.92

DUKE ENERGY PROGRESS ANALYSIS OF OIL PURCHASED APRIL 2017

	AS	SHEVILLE	BR	UNSWICK	H	HARRIS		МАҮО
VENDOR		Indigo	Selm	a Tank Farm	Selm	a Tank Farm	Greensb	oro Tank Farm
SPOT/CONTRACT	(Contract	(Contract	(Contract	(Contract
SULFUR CONTENT %		0		0		0		0
GALLONS RECEIVED		367,332		7,479		7,504		82,457
TOTAL DELIVERED COST	\$	589,215	\$	11,190	\$	4,677	\$	150,030
DELIVERED COST/GALLON	\$	1.60	\$	1.50	\$	0.62	\$	1.82
BTU/GALLON		138,000		138,000		138,000		138,000
	RO	DBINSON	R	OXBORO				
VENDOR	Selm	a Tank Farm	Greensk	ooro Tank Farm				
SPOT/CONTRACT	(Contract	(Contract				
SULFUR CONTENT %		0		0				
GALLONS RECEIVED		44,934		209,791				
TOTAL DELIVERED COST	\$	116,727	\$	381,530				
DELIVERED COST/GALLON	\$	2.60	\$	1.82				
BTU/GALLON		138,000		138,000				

Schedule 10 Page 1 of 6

Duke Energy Progress Power Plant Performance Data Twelve Month Summary

May, 2016 - April, 2017 Nuclear Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Brunswick 1	8,160,307	938	99.31	97.86
Brunswick 2	7,150,691	932	87.58	90.32
Harris 1	7,493,593	928	92.18	90.25
Robinson 2	5,574,669	741	85.88	84.70

Twelve Month Summary May, 2016 through April, 2017 Combined Cycle Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Lee Energy Complex	1A	1,270,621	200	72.59	83.87
Lee Energy Complex	1B	1,339,766	199	76.93	90.94
Lee Energy Complex	1C	1,270,482	201	72.22	86.35
Lee Energy Complex	ST1	2,382,844	379	71.87	80.95
Lee Energy Complex	Block Total	6,263,713	979	73.12	84.43
Richmond County CC	7	982,346	175	64.31	73.00
Richmond County CC	8	960,358	173	63.42	72.24
Richmond County CC	ST4	1,118,378	170	75.12	73.17
Richmond County CC	9	1,365,294	196	79.58	87.17
Richmond County CC	10	1,382,355	196	80.57	87.51
Richmond County CC	ST5	1,839,804	249	84.46	88.63
Richmond County CC	Block Total	7,648,535	1,158	75.43	81.20
Sutton Energy Complex	1A	1,457,019	202	82.42	94.82
Sutton Energy Complex	1B	1,471,726	202	83.25	95.81
Sutton Energy Complex	ST1	1,807,267	266	77.71	96.66
Sutton Energy Complex	Block Total	4,736,012	670	80.80	95.55

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress Power Plant Performance Data Twelve Month Summary May, 2016 through April, 2017

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Mayo 1	2,079,227	737	32.23	87.90
Roxboro 2	2,433,887	672	41.35	94.98
Roxboro 3	2,367,453	695	38.92	91.64
Roxboro 4	1,929,644	705	31.27	87.91

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Twelve Month Summary May, 2016 through April, 2017 Other Cycling Steam Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Asheville	1	711,106	191	42.62	81.80
Asheville	2	608,295	191	36.45	80.68
Roxboro	1	1,058,218	380	31.83	95.29

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Twelve Month Summary May, 2016 through April, 2017 Combustion Turbine Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Asheville CT	205,507	347	87.84
Blewett CT	4	60	98.99
Darlington CT	113,186	823	89.36
Richmond County CT	2,184,720	848	90.85
Sutton CT	-469	69	94.81
Wayne County CT	545,575	911	91.91
Weatherspoon CT	369	146	91.95

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Schedule 10 Page 6 of 6

Twelve Month Summary May, 2016 through April, 2017 Hydroelectric Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Blewett	72,920	27.0	76.63
Marshall	4,255	4.0	31.25
Tillery	110,477	84.0	93.65
Walters	174,856	113.0	99.05

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.